

CLAIMS

What is claimed is:

1. A cabinet for recessed refrigerators, comprising:
an outer casing to define an appearance of the cabinet, the outer casing being a box-shaped body open at a front thereof; and
an integrated single inner casing installed in the outer casing, with a predetermined space defined between the inner and outer casings, the integrated single inner casing defining therein at least two storage compartments open at fronts thereof, with a partition wall between the at least two storage compartments to maintain a predetermined gap between the storage compartments.
2. The cabinet according to claim 1, wherein the inner casing comprises: a front flange that extends from a front edge of the inner casing toward a front edge of the outer casing to cover a front of the space defined between the inner and outer casings.
3. The cabinet according to claim 1, further comprising:
at least one partition wall structure provided in back of a front end surface of the partition wall.
4. The cabinet according to claim 3, further comprising:
a support member installed in the partition wall at a position in back of the at least one partition wall structure to support the partition wall structure.
5. The cabinet according to claim 3, wherein the at least one partition wall structure comprises:
a hot pipe.
6. The cabinet according to claim 3, wherein the at least one partition wall structure comprises:
one of at least one magnet and at least one magnetic member made of magnetic material.
7. A cabinet for recessed refrigerators, comprising:

an outer casing to define an appearance of the cabinet, the outer casing being a box-shaped body open at a front thereof;

an integrated single inner casing installed in the outer casing, with a predetermined space defined between the inner and outer casings, the integrated single inner casing defining therein at least one storage compartment open at a front thereof; and

a cabinet chassis mounted along an outer surface of the outer casing to finish front edges of the inner and outer casings.

8. The cabinet according to claim 7, wherein:

the inner casing comprises a front flange that extends from the front edge of the inner casing toward the front edge of the outer casing to cover a front of the space defined between the inner and outer casings; and

the cabinet chassis finishes both the front flange of the inner casing and the front edge of the outer casing.

9. The cabinet according to claim 8, wherein the cabinet chassis comprises:

a stop flange that extends from the cabinet chassis toward the front flange of the inner casing to support the front flange of the inner casing.

10. The cabinet according to claim 7, wherein the cabinet chassis comprises:

a bent part that is bent toward a wall to cover a gap between the cabinet and the wall, wherein the wall has a recess to receive a recessed refrigerator therein.

11. A cabinet for recessed refrigerators, comprising:

an outer casing to define an appearance of the cabinet, the outer casing being a box-shaped body open at a front thereof; and

an integrated single inner casing installed in the outer casing, with a predetermined space defined between the inner and outer casings, the integrated single inner casing defining therein at least one storage compartment open at a front thereof, with a front flange extending from a front edge of the inner casing toward a front edge of the outer casing to cover a front of the space defined between the inner and outer casings.

12. The cabinet according to claim 11, further comprising:

at least one inter-casing structure provided in the space defined between the inner and outer casings at a position adjacent to the front flange of the inner casing.

13. The cabinet according to claim 12, wherein the outer casing comprises:
a support flange that extends toward the inner casing adjacent to the at least one inter-casing structure to support the inter-casing structure.

14. The cabinet according to claim 12, wherein the at least one inter-casing structure comprises:

a hot pipe.

15. The cabinet according to claim 12, wherein:
the at least one partition wall structure includes at least one magnet or at least one magnetic material.

16. The cabinet according to claim 12, wherein the at least one inter-casing structure comprises:

a sealing member to seal between the front flange of the inner casing and the support flange.

17. A cabinet for recessed refrigerators, comprising:
an outer casing to define an appearance of the cabinet, the outer casing being a box-shaped body open at a front thereof;
an integrated single inner casing installed in the outer casing, with a predetermined space defined between the inner and outer casings, the integrated single inner casing defining therein at least one storage compartment open at a front thereof;
a front flange extending from a front edge of the inner casing toward a front edge of the outer casing to cover a front of the space defined between the inner and outer casings; and
a support flange extending from the front edge of the outer casing toward the storage compartment of the inner casing adjacent to the front flange of the inner casing, the support flange being made of a magnetic material.

18. The cabinet according to claim 17, further comprising:

a sealing member interposed between the front flange of the inner casing and the support flange of the outer casing.

19. The cabinet according to claim 17, further comprising:
a hot pipe provided adjacent to the support flange of the outer casing in the predetermined space defined between the inner and outer casings.
20. A cabinet for recessed refrigerators, comprising:
an outer casing to define an appearance of the cabinet, the outer casing being a box-shaped body open at a front thereof;
an integrated single inner casing installed in the outer casing, with a predetermined space defined between the inner and outer casings, the integrated single inner casing defining therein at least one storage compartment open at a front thereof;
a front flange extending from a front edge of the inner casing toward a front edge of the outer casing to cover a front of a space defined between the inner and outer casings; and
a support flange extending from the front edge of the outer casing toward the storage compartment of the inner casing adjacent to the front flange of the inner casing, with a gap defined between the front flange of the inner casing and the support flange of the outer casing, the support flange being bent at a first location toward the front flange of the inner casing, and being bent at a second location, farther away from the outer casting than the first location, toward the storage compartment of the inner casing, thus forming a doubly bent part, the doubly bent part of the support flange being made of a magnetic material.
21. The cabinet according to claim 20, further comprising:
a hot pipe provided in the gap defined between the support flange of the outer casing and the front flange of the inner casing, such that the hot pipe is supported by the support flange.
22. The cabinet according to claim 20, further comprising:
a sealing member interposed between the front flange of the inner casing and the doubly bent part of the support flange of the outer casing.
23. The cabinet according to claim 20, further comprising:

a cabinet chassis to finish both the front flange of the inner casing and the front edge of the outer casing, and to plug the gap defined between the support flange of the outer casing and the front flange of the inner casing.

24. A cabinet for recessed refrigerators, comprising:
 - an outer casing to define an appearance of the cabinet, the outer casing being a box-shaped body open at a front thereof;
 - an integrated single inner casing installed in the outer casing, with a predetermined space defined between the inner and outer casings, the integrated single inner casing defining therein at least two storage compartments open at fronts thereof, with a partition wall formed between the at least two storage compartments to maintain a predetermined gap between the storage compartments;
 - at least one partition wall structure provided in the partition wall adjacent to a front end surface of the partition wall;
 - a support member installed in the partition wall at a position adjacent to the partition wall structure to support the at least one partition wall structure; and
 - a support panel to support the support member.
25. The cabinet according to claim 24, wherein:
the support panel is installed in the at least one partition wall at a position between a rear surface of the support member and an inner surface of a rear wall of the outer casing.
26. The cabinet according to claim 24, wherein the support panel comprises:
at least one opening.
27. The cabinet according to claim 24, wherein:
the support panel is placed in the at least one partition wall at a position eccentric to the at least one partition wall, nearer to one of the at least two storage compartments, which has a lower temperature.
28. The cabinet according to claim 24, wherein the at least one partition wall structure comprises:
at least one of a hot pipe and a magnet.

29. A cabinet for recessed refrigerators, comprising:
- an outer casing to define an appearance of the cabinet, the outer casing being a box-shaped body open at a front thereof;
 - an integrated single inner casing installed in the outer casing, with a predetermined space defined between the inner and outer casings, the integrated single inner casing defining therein at least two storage compartments open at fronts thereof, with a partition wall formed between the at least two storage compartments to maintain a predetermined gap between the storage compartments;
 - at least one partition wall structure provided in the partition wall adjacent to a front end surface of the partition wall;
 - a support member installed in the partition wall at a position adjacent to the partition wall structure to support the partition wall structure; and
 - at least one sealing member provided between the support member and the inner casing.

30. The cabinet according to claim 29, further comprising:
- a support panel to support the support member.
31. The cabinet according to claim 29, wherein the at least one partition wall structure comprises:
- at least one of a hot pipe and a magnet.
32. A cabinet for recessed refrigerators, comprising:
- an outer casing to define an appearance of the cabinet, the outer casing being open at a front thereof and stepped at a top thereof to form a lower step at a front area of the top;
 - an integrated single inner casing installed in the outer casing, with a predetermined space defined between the inner and outer casings, the integrated single inner casing defining therein at least one storage compartment open at a front thereof; and
 - a cover housing provided on the lower step to define a machine room.
33. The cabinet according to claim 32, further comprising:
- a cabinet chassis mounted along both an outer surface of the outer casing and the cover housing to finish a front of the cabinet.

34. The cabinet according to claim 33, wherein:

the inner casing comprises a front flange that extends from a front edge of the inner casing toward a front edge of the outer casing to cover a front of the space defined between the inner and outer casings; and

the cabinet chassis comprises a stop flange that extends from the cabinet chassis toward the front flange of the inner casing and the cover housing to support the front flange of the inner casing and a front of the cover housing.

35. The cabinet according to claim 33, wherein the cabinet chassis comprises:

a bent part that is bent toward a wall to cover a gap between the cabinet and the wall wherein the wall has a recess to receive a recessed refrigerator therein.

36. The cabinet according to claim 33, wherein:

the cabinet chassis is mounted to the cover housing by use of an L-shaped bracket provided at each of two corners of a front of the cover housing.

37. The cabinet according to claim 32, further comprising:

an intermediate chassis provided to finish a front of a space defined between the cover housing and the at least one storage compartment.

38. The cabinet according to claim 37, wherein:

the intermediate chassis is interposed, at a first end thereof, between the cover housing and the outer casing, and is bent at a second end thereof toward a lower edge of the cover housing to cover the lower edge of the cover housing.

39. A cabinet for a refrigerator, comprising:

a box-shaped outer casing open at a first side; and

a single integrated inner casing,

installed in the outer casing with a predetermined space defined between the inner and outer casings,

defining at least two storage compartments, open at respective first sides thereof, and

defining at least one partition wall separating the at least two storage compartments.

40. The cabinet according to claim 39, wherein the inner casing comprises:
a first flange extending from an edge of the inner casing to cover the predetermined space defined between the inner and outer casings at the first side of the outer casing.
41. The cabinet according to claim 40, further comprising:
an inter-casing structure positioned in the predetermined space defined between the inner and outer casings adjacent to the first flange.
42. The cabinet according to claim 41, wherein the outer casing comprises:
a support flange adjacent to the inter-casing structure, with a first part extending from the outer casing toward the inner casing and having a bent-part extending from the first part away from the first flange, to support the inter-casing structure and strengthen the support flange.
43. The cabinet according to claim 42, wherein the inter-casing structure comprises:
a hot pipe to prevent condensation on the first flange.
44. The cabinet according to claim 42, wherein the inter-casing structure comprises:
a magnetic member to magnetically attract a door of the cabinet.
45. The cabinet according to claim 42, wherein the inter-casing structure comprises:
a sealing member creating a seal between the support flange and the first flange.
46. The cabinet according to claim 44, wherein magnetic member comprises:
a magnet positioned between the first flange and the support flange.
47. The cabinet according to claim 44, wherein the magnetic member comprises:
a magnetic plate positioned adjacent to the first flange.
48. The cabinet according to claim 47, wherein the inter-casing structure further comprises:
a first sealing member creating a seal between the magnetic plate and the support flange.

49. The cabinet according to claim 42, wherein:
the support flange is magnetic; and
the inter-casing structure comprises a sealing member creating a seal between the first flange and the support flange.

50. The cabinet according to claim 42, wherein:
the support flange comprises a doubly bent part interposed between the first part and the bent part, wherein the doubly bent part comprises a first doubly bent part extending from the first part toward the first flange, and a second doubly bent part extending from the first doubly bent part toward the inner casing; and
the inter-casing structure comprises a sealing member creating a seal between the first flange and the second doubly bent part.

51. The cabinet according to claim 39, wherein the cabinet is installed in a recess in a wall, and the cabinet further comprises:
a cabinet chassis, mounted along an outer side of the outer casing at the first side thereof, to cover a gap between the cabinet and the wall.

52. The cabinet according to claim 51, wherein the cabinet chassis comprises:
a first part extending a predetermined distance from the outer casing in a first direction;
a second part extending from the first part, away from the cabinet; and
a third part extending from the second part opposite the first direction.

53. The cabinet according to claim 40, wherein the cabinet is installed in a recess in a wall, and the cabinet further comprises:
a cabinet chassis, mounted along an outer side of the outer casing at the first side thereof, to cover a gap between the cabinet and the wall, and having a stop flange positioned along an inner surface of the cabinet chassis to support the first flange.

54. The cabinet according to claim 53, wherein the cabinet chassis comprises:
a first part extending a predetermined distance from the outer casing in a first direction;
a second part extending from the first part, away from the cabinet; and
a third part extending from the second part opposite the first direction.

55. The cabinet according to claim 39, further comprising:
at least one partition wall structure, provided in the predetermined space defined between the inner and outer casings, adjacent to a first surface of the partition wall, and having
at least one hot pipe to prevent condensation on the partition wall, and
at least one magnetic member to magnetically attract a door of the cabinet.
56. The cabinet according to claim 55, further comprising:
a support member, provided in the predetermined space defined between the inner and outer casings, adjacent to the partition wall structure, to support the partition wall structure.
57. The cabinet according to claim 56, wherein the partition wall structure comprises:
at least one sealing member creating a seal between the support member and the inner casing.
58. The cabinet according to claim 56, further comprising:
a support panel to support the support member, provided in the predetermined space defined between the inner and outer casings, adjacent to the partition wall structure at a first end of the support panel, and adjacent to the outer casing at a second end of the support panel.
59. The cabinet according to claim 58, wherein:
the support panel comprises at least one opening.
60. The cabinet according to claim 57, wherein:
the support panel is disposed eccentrically in the partition wall.
61. A cabinet for a refrigerator, comprising:
a box-shaped outer casing open at a first side;
a single integrated inner casing,
installed in the outer casing with a predetermined space defined between the inner and outer casings,
defining at least two storage compartments, open at respective first sides thereof,
and
defining at least one partition wall separating the at least two storage compartments; and

a cabinet chassis, mounted along an outer side of the outer casing at the first side thereof, to reduce a leakage of cool air from the cabinet, and reduce power consumption.

62. A method for assembling a cabinet for a refrigerator, comprising:
installing a single integrated inner casing into an outer casing,
wherein the single integrated inner casing defines at least two storage compartments, open at respective first sides thereof, and also defines at least one partition wall separating the at least two storage compartments.